

GEOGRAPHIC NEWS BULLETINS

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THE NATIONAL GEOGRAPHIC SOCIETY

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General Headquarters, Washington, D. C.



Contents for Week of January 28, 1935. Vol. XIII. No. 28.

1. Libya "Bores" Deeper into Africa.
 2. Göteborg, Where Swedish Unemployed Rebuild a Castle.
 3. Hemp—No Longer King of Rope Fibers.
 4. Peru Celebrates Its 400th Birthday.
 5. The Vanishing Fleet of Windjammers.
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© Ewing Galloway

LLAMAS STILL BEAR THE PERUVIAN INDIAN'S BURDEN

Beyond the railways, in the steep rocky valleys of the Andes, these sturdy animals serve man as they did centuries before the European came. To-day they also carry tons of silver and copper ores from outlying mines to smelters. The baby doesn't seem to mind the "rumble seat" made of mother's shawl (see Bulletin No. 4).

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

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Libya "Bores" Deeper into Africa

ONE of the most important results of the Italy-French conference held in Rome recently was an agreement concerning boundaries between colonies of the two nations in Africa. Italy gained more than 45,000 square miles of French territory in the heart of the Sahara Desert, and also a small strip of land along the border between the Italian colony of Eritrea and French Somaliland.

The 45,000 square miles in the Sahara, an area equal to the State of New York, will be added to the growing colony of Libya, which last year was enlarged by a British-Egyptian gift of land adjoining it in the Anglo-Egyptian Sudan. A boundary commission will determine the exact limits of France's new cession, but it can be roughly defined as the Saharan territory of Tibesti.

The new Libyan frontier will extend southeast from Tummo to the intersection of the 24th meridian, East Longitude, and 18 degrees, 45 minutes, North Latitude. Italy will thus get the oases of Auzu and Guezenti, and France will retain those of Bardai and Tekro.

Twice Size of Texas

Libya, without the additional territory, is more than twice as large as the State of Texas. For purposes of government the huge colony is divided into two districts, one known as Tripolitania and the other as Cirenaica (see illustration, next page). Except along a narrow strip bordering the Mediterranean, most of the country is rather barren.

In oases and along the few fertile river valleys, however, dates, olives, lemons, figs, and almonds are grown. Pasturage is abundant in Cirenaica.

Tibesti is a mountainous region south of the Tropic of Cancer. It was a part of French Sudan and is situated between the 15th and 20th degrees of east longitude and the 20th and 24th degrees of north latitude.

The effect of these joint cessions is to extend Italian Libya some 200 miles deeper into Central Africa, but they fall far short of Italian ambitions. Italy asked for a corridor to Central Africa.

Emi Kusi, the highest mountain in the Sahara, towers over surrounding Tibesti peaks in the region ceded to Italy by France. The Tibestian massif comprises a succession of peaks, gaps, and dried-up river beds rather than a mountain chain, extending into the desert region ceded by Great Britain and Egypt.

Region of Nomadic Tribes

Water sources in Tibesti are ample, but good pasture areas are rare. Temperatures are mild near the base of mountains and cold near the summits—seldom, if ever, below freezing, however. Date and several other types of palm trees grow in Tibesti, and besides camels there are goats and donkeys. Except for a few nomadic tribes—Koussada, Toubou, and some Senussi—the region is for the most part uninhabited.

Presenting a more orthodox desert aspect than the French cession, the Anglo-Egyptian territorial gift is a broad tableland of shifting sands, occasional mountain regions, little pasturage, practically no rain, a hot climate, long caravan routes broken by scattered wells, oases at widely separated points, and few villages.

Water supplies may be replenished at the well of Sarra, located in a stretch of hard, reddish sandstone 160 miles south and west of Kufra. Let southeast-bound



© A. J. Villiers

TO A SEAMAN'S EYE, THE MOST BEAUTIFUL SIGHT IN THE WORLD

An unusual study of a full-rigged windjammer with every stitch of canvas ("except the captain's pants," as they say in the trade) unfurled. The six sails on the mainmast are (from bottom to top): mainsail, lower and upper maintopsails, lower and upper main-topgallant sails, and the royal (see Bulletin No. 5).

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Göteborg, Where Swedish Unemployed Rebuild a Castle

SWEDEN, too, has an unemployment problem, and is providing work for some of its jobless by restoring historic Bohus Castle (see illustration, next page).

A picturesque ruin, Bohus Castle has long been a landmark near Göteborg (Gothenburg), the San Francisco of Sweden's west coast, and the third largest city in the country. Relief workers are uncovering dungeons, stately baronial halls, and other secrets of this ancient stronghold, dating from the Middle Ages, and, in a small tower, are preparing a museum of relics and other mementos of interest to visitors.

Göteborg owes its importance as a busy shipping center to its splendid situation at the mouth of the Göta River, which here empties into the Kattegat. Ships from Göteborg encircle the globe, and unfurl the blue and yellow flag of Sweden in every port.

Ice-Breakers Keep Harbor Open

In order to attract vessels of other nations, the citizens of Göteborg have constructed one of the world's most modern harbors. Long quays on both sides of the Göta River have railway connections which speed the arrival and departure of raw and manufactured goods of all kinds. Ice-breakers keep the harbor open during the long winter months. Dry docks offer repair facilities to both ocean liners and the tiny trawlers of Scandinavian fishermen.

Visitors to Göteborg who enjoy water travel may go by boat from there across the country to Stockholm, the capital, by means of the Göta Canal, a feat of engineering which dates back more than a century. For land travelers, six railroads keep Göteborg in constant touch with the rest of Sweden and many of the larger Norse towns.

Göteborg's commercial activity and enterprise contrast with the quiet towns of Swedish Dalecarlia much as Birmingham, England, compares with Stratford-on-Avon. Its manufactures range from elevators to sugar-refining machinery. Although it ranks second to Malmö in commercial importance, Göteborg justifies the expectation of its founder, the soldier-king, Gustavus Adolphus, that it would be a memorial to Sweden's industry.

Modern Suburbs for Workers

Beyond Göteborg proper lie modern suburbs which house most of the working population and which are connected with the city by electric railways. In the old part of Göteborg, canals built by Dutchmen whom Gustavus Adolphus, in 1619, hired to plan their city, are largely filled up. Fragments of them remain and form picturesque little lakes.

The Storahamn, Östrahamn and Vestrahamn canals still exist almost in entirety. A semicircular moat, which divides the old town from the suburbs, has been converted into a landscaped parkway. Its banks are planted with shrubbery, and on one side lies an extensive botanical garden.

At another place along the moat is found the daily market. Here the market women sit behind little stands and trade in a variety of produce which ranges from fresh fruit to squawking chickens. In the summer, outdoor restaurants set in the Slottskogen Park form an attractive phase of Göteborg's social life. Memories of its founder are evoked by the tall statue of Gustavus Adolphus in big boots, military cloak and befeathered hat, in one of the city squares.

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caravans drink deeply, however, because it is 500 miles to the next oasis at Unianga, French Sudan, over a route containing no pasturage. Many camels have died on this journey. Pasturage has been found 90 miles to the east of Sarra in an unexplored mountain mass not exceeding 150 to 200 square miles, and estimated to reach a height of 4,000 feet.

Oases are nearer on routes north of Sarra. The Arkenu, in the southwest corner of Egypt, and the Ouenat, in Anglo-Egyptian Sudan, are not far away. Still farther north is the oasis of Kufra, the last stronghold of a once powerful religious sect, the Senussi.

Senussi Raise Fruits and Vegetables

Industrious, the Senussi have succeeded in raising melons, grapes, bananas, and some vegetables at Kufra. Olive trees and many date trees are grown, chickens and pigeons are raised, and camels, sheep, donkeys, and a few horses are bred. Kufra once was the trading center for camel caravans from the south. South and west of the Sarre well, the new accession comprises desert, sand-dunes, zones of occasional dry grass affording meager grazing for camels, shifting sands, and no habitations.

Note: For other references to Italian possession in Africa see "Three-Wheeling Through Africa," *National Geographic Magazine*, January, 1934; "Sailing Forbidden Coasts," September, 1931; "Cirenaica, Eastern Wing of Italian Libya," June, 1930; "Tripolitania, Where Rome Resumes Sway," August, 1925; and "Crossing the Untraversed Libyan Desert," September, 1924.

See also in the *GEOGRAPHIC NEWS BULLETINS*: "Do You Know Italian Somaliland?" week of November 12, 1934.

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Photograph by Vittorio Dimani

RUGS ARE USED ON BOTH FLOOR AND WALLS OF DESERT HOMES

Although the people of Libya, Italy's north African colony, weave little as compared with their neighbors, what they do is well done. In this Cirenaican home even the small daughters lend a hand in the preparation of yarn for mother's loom. The chief native industry of the region, however, is the making of beautifully decorated leather pillow tops.

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Hemp—No Longer King of Rope Fibers

ONCE "rope" and "hemp" meant practically the same thing. But to-day very little rope is made of hemp. Abacá, a fiber grown in the Philippines, has all but shouldered hemp out of the rope industry. Because of old traditions in rope making and an early error, however, abacá is spoken of, even in the cordage trade, as "Manila hemp."

Whether you are a schoolgirl skipping rope, a cowboy lassoing cattle, a painter standing on a scaffold, a motorist whose car is being towed, a housewife hanging a clothesline, or a yachtsman reefing a mainsail, you are dependent on rope or twine to help you in doing some daily task.

If the thread of the story of rope—and first hemp—is traced back far enough, it will lead to the court of Shen Nung, Emperor of China 2,700 years before Christ. He taught his subjects to grow "ma" (hemp), a plant of both male and female forms, used for making hempen cloth. In the 8th Century India knew the hemp plant principally as a source of drugs. Neither the Hebrews nor the Egyptians were familiar with it, but during medieval times it was found in Northern Africa.

Italy Grows Best Hemp

Wandering tribes introduced hemp into Europe about 1500 B. C., but no importance was attached to European plants until the French imported Chinese hemp centuries later. Italy early turned its attention to hemp growing, and to-day the highest-priced hemp in the markets of either Europe or America is grown there. South America received its first plants from Spain.

New England and Virginia cultivated hemp in early Colonial days. The Southern crop flourished, and, in 1802, the blue grass region of Kentucky supported two extensive ropewalks (factories for making rope). During the 19th Century Kentucky led the United States in the production of hemp. Women spun it into clothes for themselves and their menfolk.

All American clipper ships built up to 1850 were equipped with rope, sails, cables, halyards, and shrouds from American hemp fields, as many as 1,000 acres being required to grow enough hemp to outfit one vessel. It was in those middle years of the 19th Century—"the good old days" to come—that the words "rope" and "hemp" began to mean practically the same thing. Since 1930 very little hemp has been grown anywhere in the United States.

Rope from Banana Plants

By 1850 England was selling a better rope for marine purposes than could be made in the United States. American manufacturers began to take greater interest in the "hemp of Manila" used by the British. That Philippine product, abacá, it was found, is derived from a plant of the banana family. It was grown a considerable distance from Manila, but was taken there for export.

American cordage makers began importing the new fiber, and soon American-made abacá rope took its place among the best rope in the world. True hemp—the kind that had been grown in Kentucky—then found its greatest level of usefulness in wrapping twines.

Although the rugged, salt-water-resisting abacá fiber proved to be best for making rope, it was not the most serious competitor of true hemp. Jute, India's contribution to the world's fibers, has completely ousted hemp from many of its former uses. It is the cheapest and most easily spun of any of the soft fibers and is woven into sacks for coffee, sugar and grain, and covering for cotton bales and packages of merchandise in transit. Weaker and less durable than any of the important textile fibers, it is less satisfactory than hemp for twine, carpet warp, or furniture webbing.

Twine from Cotton

In recent years the United States has imported an average of 1,500 tons of untreated hemp, chiefly fine grades of Italian hemp; but has brought in each year 75,000 tons of raw jute and 575,000 pounds of India burlap (made of jute).

Cotton, as well as jute, has elbowed hemp products from the market for certain purposes. As in the case of jute, however, cotton is neither so strong nor so durable as hemp twine. Nevertheless, twine-making by cotton mills is an important secondary industry, the value of which is written in millions of dollars each year.

Any "geography of rope" must not overlook sisal and henequen. They are obtained from the leaves of two closely related but distinct plant species, native to the Yucatan Peninsula. Over a half-million acres in Mexico and Central America are planted with henequen, but sisal

Göteborg Is Modern City

No aspect of the past confronts the visitor to Göteborg. The streets are wide and straight and the houses modern. The university is fully as modernized as the state universities of Uppsala and Lund. The Lorensburg theater, one of Sweden's leading playhouses, presents ultra-modern drama.

Even the East India Company's house, where Göteborg merchants once directed a far-flung commerce between Sweden and the Indies, now houses a complete and modern museum. Göteborg claims one distinction of which no American city of equal size can yet boast—every private house and every kiosk in the street possesses a telephone.

Note: Students preparing projects or units about Scandinavian countries will find additional photographs (many in natural color) and data in the following: "Flying Around the North Atlantic," *National Geographic Magazine*, September, 1934; "Country-House Life in Sweden," July, 1934; "Norway, A Land of Stern Reality," July, 1930; and "Granite City of the North (Stockholm)" also "Sweden, Land of White Birch and White Coal," October, 1928.

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Photograph by G. Hewlin

ITS TOWERS ARE CALLED "FATHER AND MOTHER'S CAP"

Bohus Castle, now being restored by Swedish Relief workers, turns back the hand of time more than 600 years, recalling the stirring role it has played in Swedish history as one of the greatest strongholds in all Scandinavia. Travelers bound for the Göta canal view this picturesque ruin as their steamer slowly proceeds up the Göta River.

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Peru Celebrates Its 400th Birthday

FOUR hundred years ago, on January 18, that hardy Spanish adventurer, Francisco Pizarro, founded the City of Kings (Lima). This month all Peru, and representatives from many other Latin-American nations, are celebrating the 400th birthday of this important South American country.

Few nations, unless they are continental in extent, possess as many contrasting natural features as does Peru. Although it occupies less than a tenth of South America, Peru has almost every climate under heaven, with many of the products that go with them.

Peru, in fact, has the sand-dunes of the Sahara; the fertile, sun-bathed, irrigated valleys of California; the dry grazing lands of Australia; the productive mountain valleys and uplands of Kashmir; the snowy peaks of Switzerland; and the tropical jungles of Central Africa and Brazil.

The Andes, Dictator of Climate and Commerce

Much of the surface of the country is disrupted by the towering ranges of the Andes, with few passes less than 15,000 feet high, and with numerous peaks exceeding 21,000 feet. These great ramparts are responsible for the diversity of Peru's climate. They drain moisture from Atlantic winds and so create tropical jungles that stretch from their bases toward the interior of the continent, thrust slopes and plateaus up into the cool regions of the upper air, and cut off the Pacific coast section from the moisture-laden winds, making much of it a desert.

Although the strip of Peru between the Pacific and the western foothills of the Andes is almost devoid of rain, many streams from the mountains traverse this region, and the narrow valleys, irrigated from their waters, constitute the most fertile land of the country.

In these defiles grow cotton, sugar-cane, corn, vineyards and olive trees, various fruits, and nearly all other products of the semi-tropical regions. From the most remote part of Peru, on the east side of the Andes, however, come exports with which Americans are perhaps most familiar—quinine, cocaine, rubber and cocoa.

Would Cover a Third of U. S.

Isolated on the Pacific coast of South America before the building of the Panama Canal, Peru was, until recently, one of the least known of South American nations. Probably it is still looked upon as a small patch of territory. In reality it possesses only a little less than a third the area of the United States. It has a sea coast of 1,300 miles, practically equal to the Pacific coast line of the United States.

If Peru were laid down on the surface of the United States so that its southernmost point coincided with the lower tip of Texas, its northeastern corner would lie near Peoria, Illinois, and its northwestern point near Cheyenne, Wyoming. The rough triangle would cover practically all of Texas, Oklahoma, and Kansas, half of Nebraska, parts of Illinois, Missouri, Colorado, Iowa and South Dakota, and fragments of New Mexico and Wyoming.

Peru, no less than the United States, contains a mixture of races. The total population is not accurately known, but is probably more than 4,500,000. The chief numerical element in the population is contributed by the civilized Indians, numbering about 4,000,000, who live for the most part in the upland plains and on the mountain slopes. The number of wild Indians in the tropical jungles can only be estimated. In addition to Indians there is a large number of mixed Indian and

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is cultivated there to-day only to a limited extent. The great sisal-producing regions are Netherland India and British East Africa.

Henequen and sisal are used in the manufacture of binder twine, other hard fiber twines, and ropes of small diameter.

Rope-making itself is an interesting story, but one too long to be told in detail. One of the operations, that of spinning the yarn after the fiber had been hackled, called for much walking in the early days of rope manufacture. While he backed down the ropewalk, the spinner drew out the fibers as they turned on hooks of a wheel. Some walks were covered, others were sheltered at either end, still others were wholly out-of-doors, and many were as long as 400 yards. The spinner kept his backward pace constant, otherwise the yarn would not have been uniform. To-day he rides a vehicle, in appearance not unlike a hand car, which runs on tracks.

Rope Fibers Put to Many Uses

In the use of fibers to-day the line-up is something like this: Plumbers, shipbuilders, and tailors of men's fine clothes use hemp fiber, probably from Wisconsin (which now leads Kentucky) or from sunny Italy. Plumbers and shipbuilders make use of the fiber for caulking pipes and seams; tailors, as webbing in good suits.

Steeple-jacks, yachtmen, cowboys, and house-painters use fine ropes made in the United States from abacá grown in the Philippine Islands. Schoolgirls, schoolboys and housewives use skip-ropes, balls of string for kite-flying, and clotheslines made of cotton.

Postal employees, coffee packers, and cotton-gin workers use twine, sacks, and covering made from jute grown in India. Grain-growers tie their sheaves with binder twine made from Yucatan henequen, or true sisal from Netherland India, or British East Africa.

Note: For pictures showing fields of growing hemp, ancient ropewalks, and sisal plantations see: "The Spell of Romania," *National Geographic Magazine*, April, 1934; "New York—An Empire Within a Republic," November, 1933; "Cuba—The Isle of Romance," September, 1933; "Some Impressions of 150,000 Miles of Travel," May, 1930; "Jamaica, the Isle of Many Rivers," January, 1927; "Skirting the Shores of Sunrise," December, 1926; "Collarin' Cape Cod," October, 1925; "Cairo to Cape Town, Overland," February, 1925; "A Longitudinal Journey Through Chile," September, 1922; and "Great Britain's Bread upon the Waters," March, 1916.

Bound volumes of the *National Geographic Magazine* may be consulted in your school or local library.

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Photograph by George R. King

ROPEMAKING AT A NEW YORK STATE MILL

Modern machinery performs many of the processes once done by hand and ancient "rope walks." In this Auburn, New York, factory the fibers are first combed and laid parallel; then twisted into threads, which in turn are twisted into strands. Several strands make a cord, several cords a rope, several ropes a hawser, and several hawsers a cable.

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The Vanishing Fleet of Windjammers

THE "stern and rockbound coast" of south Brooklyn doesn't often come into the news as a shipping hazard. But it appeared in headlines recently when the three-masted, square-rigged sailing ship *Joseph Conrad*, a type of craft New York harbor had not seen for many years, was blown on the shore of the Bay Ridge section during a storm.

One of the few of these picturesque wooden sailing ships remaining in service, the *Joseph Conrad* is owned by the author-sailor Alan Villiers, who sailed her across the Atlantic from England.

In a communication to the National Geographic Society Mr. Villiers describes the "vanishing fleet" of windjammers and the home port of most of them in the Baltic Sea.

Clippers Passed When Suez Canal Was Opened

"Twenty-six of the surviving square-rigged ships in commission throughout the world are registered in the small ports of the Aland Islands, between Finland and Sweden in the Baltic Sea," he writes.

"Suez was opened in 1869 and the clippers passed. Steam grew and grew. The wooden ships of the American Merchant Service suffered; gradually at first, but soon hurriedly, and then, in a panic, they were discarded.

"In the great discard of sail the Aland Islanders, unworried by steam (and unworried by motor-ships and turbo-electric drive even now), bought up such vessels as appeared to be good bargains. They acquired Nova Scotian barks, Bluenose barkentines, Down East full-riggers. The vessels were old and pretty nearly worn out when the Alanders got them, but the men were perfect sailors and great shipowners. They could nurse a ship back from the scrap heap and grind a profit from her for years.

"They bought ships cheaply, and they bought good ships. One of their ship-owning principles was that a ship should return her cost in three years. Buying cheaply, they could do this; if freights did not pay, they laid their ships up. The capital investment was so small, and usually there were so many shareholders, that it did not matter. They could wait for better times, and there was no flag upon the earth with which they could not compete.

Aland Mariners Still Scorn Metal Hulls

"So the turn of the century found them gradually adding metal-built ships to their large fleet, though there were many old-timers who looked upon ships of iron and steel with doubt, holding that it was not right to build ships of metal when there was good wood. Wood would float, they said. Iron sank. Give them wood.

"Now the British were steadily scrapping their big sailing vessels; the wooden ships from America were worn out and could no longer be used for the deep sea. They descended to carrying timber in the Baltic and North Sea, and they were kept at that, with windmill pumps sending the clear water through their old sides, until they fell to pieces.

"Iron ships were acquired to send tramping on ocean voyages. Mariehamn was growing now, and that strange name began to be seen upon the counters of ships in the Plata, at Valparaiso and in Table Bay, in Melbourne and Mobile. Wherever sailing ships went, the Aland ships were seen. Quietly they entered the commerce of the world; but still no one paid any attention to them, and there was

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Spanish stock. These, together with a few inhabitants of pure Spanish descent, have controlled the political fortunes of Peru.

Peru was the last of the South American colonies to throw off the yoke of Spain. Lima was the seat of government for the entire continent. The viceroy maintained there a court which was a faithful copy, on a minor scale, of the court at Madrid, and kept many of the Spanish nobility about him.

Finally San Martin, an Argentinian general, persuaded his countrymen and the Chileans that their independence could be made safe only by driving the Spaniards from Peru. He spent many years in his effort to liberate the Peruvians. He succeeded in entering Lima with his army on July 9, 1821, and on July 28 issued the Peruvian proclamation of independence.

Note: For other material about Peru, ancient and modern, see also: "Forgotten Valley of Peru," *National Geographic Magazine*, January, 1934; "Air Adventures in Peru," January, 1933; "The Lure of Lima, City of the Kings," June, 1930; "Flying the World's Longest Air-Mail Route," March, 1930; "Buenos Aires to Washington by Horse," February, 1929; "How Latin America Looks from the Air," October, 1927; "The Most Valuable Bird (Guanay) in the World," September, 1924; "Peru's Wealth-Producing Birds," June, 1920; "Further Explorations in the Land of the Incas" and "Staircase Farms of the Ancients," May, 1916; and "The Story of Machu Picchu," February, 1915.

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Photograph courtesy Pan American Union

MODERN SHOPS LINE THIS ARCADE IN LIMA

In the Galería Carmen are displayed the latest wares of Paris, London, and New York. Upper-class women of the Peruvian capital give much attention to their dress, and, as a group, are as well gownned as the women of any city in the southern hemisphere.

no idea whatever that here alone sail would last when it had died in all other waters.

"At the outbreak of the World War thirty big ships had been brought to Aland and were run successfully. At the same time wooden ships were still being built for the short trades, and bought from Norway and Estonia, Sweden and Denmark, as they were discarded there. Through the war the Aland ships suffered heavily.

"Sailing ships were largely kept, during those dangerous years, in the Pacific Ocean and on the Atlantic seaboard of the two Americas, where there was less chance of doom from mine and submarine. Insurance rates on sail were very high, and the risks of making an Atlantic crossing were considerable; but here the best freights were paid and here the hardy Alanders ran their ships."

Note: For other photographs of square-rigged ships and descriptions of life aboard modern windjammers see: "Where the Sailing Ship Survives," *National Geographic Magazine*, January, 1935; "Washington, The Evergreen State," February, 1933; "Cape Horn Grain-Ship Race," January, 1933; "Out in San Francisco," April, 1932; and "Rounding the Horn in a Windjammer," February, 1931.

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A DANGEROUS MOMENT WHILE "ROUNDING THE HORN"

When Father Neptune is in an angry mood, and sweeps tons of boiling sea water onto the deck, all hands must cling to ropes for their lives. During a storm it is more dangerous to work on deck than aloft. Contrast this turbulent scene with the graceful dignity of fair-weather sailing, page 2.

